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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,764	05/14/2001	Carlos A. Hoyos		8884

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EXAMINER

MISLEH, JUSTIN P

ART UNIT PAPER NUMBER

2612

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,764

Applicant(s)

HOYOS, CARLOS A.

Examiner

Justin P. Misleh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Application Informalities

1. Applicant's amendments to the specification and claims overcome all previous informalities. There are no further objections.

Prior Art

2. Applicant's arguments filed 15 Feb. 2005 have been fully considered but they are not persuasive.

3. More specifically, Applicant believes Viney et al. does not disclose a camera control handle and thus cannot teach the features of claims 1, 19, and 34, as amended. In support thereof, Applicant asserts that there would be no need for a camera control handle in Viney et al. since there is no direct control of the movement of a camera instead there is control of the movement of the station 1 on which the camera is mounted. Applicant further states that as shown in figure 11, camera control handle 126 enables an operator of the remote control to control a remote imaging device as if he/she were in actual physical control of the imaging device.

4. The Examiner disagrees with Applicant's position regarding Viney et al. at least because the features regarding the camera control handle 126 of figure 11 are simply not claimed. Applicant simply claims, *inter alia*, a remote control having a camera control handle. Viney et al. does in fact disclose a remote control having a camera control handle. More specifically, as

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shown in figure 3, the remote control (3) includes a camera control handle (31). Viney et al. supports figure 3 by stating in column 5 (lines 57 – 61), “the aiming control 31 may be a joystick ... which allows the user to manually command movement of the total station 1.” Furthermore, Viney et al. states in column 4 (line 63) – column 5 (line 4), “the camera 11 is integrated with the total station 1 such that ... rotating the total station 1 pans the field of view of the camera 11.” Thus, Viney et al. disclose that the camera control handle (31) of the remote control (3) enables an operator of the remote control to control a remote imaging device as if he/she were in actual physical control of the imaging device.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 19 – 29, 31 – 44, and 46 – 48** are rejected under 35 U.S.C. 102(b) as being anticipated by Viney et al.

7. For **Claim 19**, Viney et al. disclose, as shown in figures 1 – 4 and as stated in columns 2 (lines 66 and 67), 3 (lines 16 – 29, 43 – 45, and 56 – 58), 4 (lines 10 – 23 and 63 – 67), 5 (lines 1 – 4 and 12 – 67), and 6 (lines 28 – 32, 44 – 48, and 55 – 60), a remote control (3) comprising:

- a video display (20) for displaying the output of an imaging device (11);
- one or more imaging platform motion controls (input unit 21);
- at least one of iris, zoom, and focus controller (32) for the imaging device; and

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a camera control handle (aiming control 31).

8. For **Claim 34**, Viney et al. disclose, as shown in figures 1 – 4 and as stated in columns 2 (lines 66 and 67), 3 (lines 16 – 29, 43 – 45, and 56 – 58), 4 (lines 10 – 23 and 63 – 67), 5 (lines 1 – 4 and 12 – 67), and 6 (lines 28 – 32, 44 – 48, and 55 – 60), in a conventional arrangement for remotely operating an imaging device (11) and an imaging platform (1), including a plurality of operators and operating equipment (1 and 3), wherein the improvement consists of:

a remote control (3) having a video display (20) for displaying the output of the imaging device (11), one or more imaging platform motion controls (input unit 21), at least one of iris, zoom, and focus controller (32) for the imaging device (11), and a camera control handle (aiming control 31).

9. As for **Claims 20 and 35**, Viney et al. disclose, as shown in figure 3, wherein the remote control (3) further comprises a video receiver interface (22, 23, 24, and 27).

10. As for **Claims 21 and 36**, Viney et al. disclose, as shown in figure 3, wherein the video receiver interface (22, 23, 24, and 27) further comprises an external video receiver interface (23). The antenna (23) is an interface to receive external video.

11. As for **Claims 22 and 37** (please see the objection to the Specification corresponding to these claims), Viney et al. disclose, as shown in figure 3, wherein the video receiver interface (22, 23, and 24, and 27) further comprises multiple video receivers, in a series/parallel combination circuit. The video receiver interface consists of antenna (23), transceiver (22), control logic (24), and video chip (27), which is series/parallel combination circuit.

12. As for **Claims 23 and 38**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 27 – 33), the video receiver interface (22, 23, and 24, and 27) further comprises

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an exchangeable video receiver (exchangeable for software implementation rather than hardware implementation).

13. As for **Claims 24 and 39**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 58 – 61), wherein the imaging platform motion control (input unit 21) further comprises a joystick (31).

14. As for **Claims 25 and 40**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 58 – 61), wherein the imaging platform motion control (input unit 21) further comprises a selectable response speed controller (31). The imaging platform motion control (31) may be a joystick, trackball, touchpad, or any other suitable device, all of which whose response speed is directly proportional to the user's (selectable) operational speed (speed at which the user operates the motion control).

15. As for **Claims 26 and 41**, Viney et al. disclose, as stated in column 5 (lines 64 – 67), wherein the at least one of iris, zoom, and focus controller (32) further comprises a corresponding fine adjustment controller.

16. As for **Claims 27 and 42**, Viney et al. disclose, as shown in figure 3, wherein the remote control (3) further comprises an independent power source (26).

17. As for **Claims 28 and 43**, Viney et al. disclose, as shown in figure 3, wherein the independent power source (26) further comprises one or more batteries (26).

18. As for **Claims 29 and 44**, Viney et al. disclose, as shown in figure 3 and as stated column 5 (lines 34 – 43), wherein the video display further comprises a video monitor.

19. As for **Claims 31 and 46**, Viney et al. disclose, as shown in figures 3 and 4 and as stated in column 6 (lines 44 – 67), wherein the remote control (3) further comprises a programming

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display (20) and control. The display (20) serves as a video display for displaying received images and as a control display for adjusting the field of view.

20. As for **Claims 32 and 47**, Viney et al. disclose, as stated in columns 4 (lines 5 – 10) and 7 (lines 26 – 28), an ob-board communication package (22 and 23) allowing interaction between a remote control operator (at 3) and other personnel (at 1). As stated, a user may be at the imaging platform adjusting the imaging device and a user may be at the remote control operating the imaging platform.

21. As for **Claims 33 and 48**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 18 – 26), wherein the remote control further comprises a wireless connection to at least one of the imaging device (11) or imaging platform (1).

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. **Claims 1 – 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Viney et al. in view of Tyler.

24. For **Claim 1**, Viney et al. disclose, as shown in figures 1 – 4 and as stated in columns 2 (lines 66 and 67), 3 (lines 16 – 29, 43 – 45, and 56 – 58), 4 (lines 10 – 23 and 63 – 67), 5 (lines 1 – 4 and 12 – 67), and 6 (lines 28 – 32, 44 – 48, and 55 – 60), a remote control imaging system comprising:

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an imaging device (11) supported by an imaging platform (1); and
a remote control (3) having a video display (20) for displaying the output of the imaging device (11), one or more imaging platform motion controls (input unit 21), at least one of iris, zoom, and focus controller (32) for the imaging device (11), and a camera control handle (aiming control 31).

While, Viney et al. disclose that the imaging platform (1) is capable of controllable motion about two orthogonal axes (see column 5, lines 1 – 4), Viney et al. do not disclose wherein the imaging platform is capable of controllable motion about three orthogonal axes.

On the other hand, Tyler also discloses an imaging platform. More specifically, Tyler discloses, as shown figure 1 and as stated in columns 4 (lines 40 – 45 and 64 – 68) and 5 (lines 1 – 18), controllably moving the imaging platform (10) about a vertical axis; controllably moving the imaging platform (10) about a horizontal axis (22) that is orthogonal to the vertical axis; and controllably moving the camera about a second horizontal axis (20) that is orthogonal to the horizontal axis (22) and the vertical axis. As stated in columns 1 (lines 61 – 65) and 2 (lines 20 – 25), at the time the invention was made, one with ordinary skill in the art would have been motivated to include an imaging platform that is capable of controllable motion about three orthogonal axis, as taught by Tyler, in the remote control imaging system, disclosed by Viney et al., as a means to provide a gyroscopically stable imaging platform with a greater degree of movement. Therefore, at the time the invention was made, it would have been obvious to one with ordinary skill in the art to have included an imaging platform that is capable of controllable motion about three orthogonal axis, as taught by Tyler, in the remote control imaging system, disclosed by Viney et al.

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25. As for **Claim 2**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 18 – 26 and 48 – 63), the system of Claim 1 further comprising: a camera system control (13, 15, 16, 22, 23, and 24) for providing wireless interconnection (8) between the imaging device (11) and the remote control (3), the camera system control having multiple independent channels of operation (circuits connected to control logic 13 and circuits connected to control logic 24) for at least one of iris, zoom, and focus controller (32), and proportional control outputs to the imaging device (11).

26. As for **Claim 3**, Viney et al. disclose, as shown in figure 3, the system of Claim 2 further comprising: a camera interface (connection between camera 11 and control logic 13) for connecting an imaging device (11) and a camera system control (13).

27. As for **Claim 4**, Viney et al. disclose, as shown in figure 1 and as stated in columns 4 (lines 63 – 67) and 5 (lines 1 – 4), the system of Claim 1 further comprising: a universal adapter (connection between the tripod and the imaging platform 1) for connecting the imaging platform (1) to a variety of support devices (tripod and L-bracket, clearly shown in figure 1).

28. As for **Claim 5**, Viney et al. disclose, as shown in figure 3, wherein the remote control (3) further comprises a video receiver interface (22, 23, 24, and 27).

29. As for **Claim 6**, Viney et al. disclose, as shown in figure 3, wherein the video receiver interface (22, 23, 24, and 27) further comprises an external video receiver interface (23). The antenna (23) is an interface to receive external video.

30. As for **Claim 7** (please see the objection to the Specification corresponding to these claims), Viney et al. disclose, as shown in figure 3, wherein the video receiver interface (22, 23, and 24, and 27) further comprises multiple video receivers, in a series/parallel combination

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circuit. The video receiver interface consists of antenna (23), transceiver (22), control logic (24), and video chip (27), which is series/parallel combination circuit.

31. As for **Claim 8**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 27 – 33), the video receiver interface (22, 23, and 24, and 27) further comprises an exchangeable video receiver (exchangeable for software implementation rather than hardware implementation).

32. As for **Claim 9**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 58 – 61), wherein the imaging platform motion control (input unit 21) further comprises a joystick (31).

33. As for **Claim 10**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 58 – 61), wherein the imaging platform motion control (input unit 21) further comprises a selectable response speed controller (31). The imaging platform motion control (31) may be a joystick, trackball, touchpad, or any other suitable device, all of which whose response speed is directly proportional to the user's (selectable) operational speed (speed at which the user operates the motion control).

34. As for **Claim 11**, Viney et al. disclose, as stated in column 5 (lines 64 – 67), wherein the at least one of iris, zoom, and focus controller (32) further comprises a corresponding fine adjustment controller.

35. As for **Claim 12**, Viney et al. disclose, as shown in figure 3, wherein the remote control (3) further comprises an independent power source (26).

36. As for **Claim 13**, Viney et al. disclose, as shown in figure 3, wherein the independent power source (26) further comprises one or more batteries (26).

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37. As for **Claim 14**, Viney et al. disclose, as shown in figure 3 and as stated column 5 (lines 34 – 43), wherein the video display further comprises a video monitor.

38. As for **Claim 15**, Viney et al. disclose a video display (20); however, Viney et al. do not disclose wherein the video display (20) comprises a television tuner. Official Notice is taken that both the concepts and advantages of providing a video display comprising a television tuner are well know and expected in the art as means to provide entertainment to the remote control operator when the imaging device is not in use.

39. As for **Claim 16**, Viney et al. disclose, as shown in figures 3 and 4 and as stated in column 6 (lines 44 – 67), wherein the remote control (3) further comprises a programming display (20) and control. The display (20) serves as a video display for displaying received images and as a control display for adjusting the field of view.

40. As for **Claim 17**, Viney et al. disclose, as stated in columns 4 (lines 5 – 10) and 7 (lines 26 – 28), an ob-board communication package (22 and 23) allowing interaction between a remote control operator (at 3) and other personnel (at 1). As stated, a user may be at the imaging platform adjusting the imaging device and a user may be at the remote control operating the imaging platform.

41. As for **Claim 18**, Viney et al. disclose, as shown in figure 3 and as stated in column 5 (lines 18 – 26), wherein the remote control further comprises a wireless connection to at least one of the imaging device (11) or imaging platform (1).

42. **Claims 30 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Viney et al.

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43. As for **Claims 30 and 45**, Viney et al. disclose Viney et al. disclose a video display (20); however, Viney et al. do not disclose wherein the video display (20) comprises a television tuner.

Official Notice is taken that both the concepts and advantages of providing a video display comprising a television tuner are well known and expected in the art as means to provide entertainment to the remote control operator when the imaging device is not in use.

Conclusion

44. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Thursday from 7:30 AM to 5:00 PM and on alternating Fridays from 8:00 AM to 4:30 PM.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Wendy R Garber can be reached on 571.272.7308. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
June 7, 2005


AUNG MOE
PRIMARY EXAMINER